

REMARKS UNDER 37 CFR § 1.111

Formal Matters

Claims 1-21 are pending after entry of the amendments set forth herein.

Claims 1-9 were examined. Claims 1-9 were rejected.

Claims 1, 2, 4, 5 and 7 are amended. The amendments to the claims were made solely in the interest of expediting prosecution, and are not to be construed as an acquiescence to any objection or rejection of any claim. Support for the amendments to the claims is found in the claims as originally filed, and throughout the specification, in particular at the following exemplary locations: page 3, lines 10-17, page 5 line 21-page 6 line 4 and page 7 line 35. Support for new claims 14-19 may be found on page 3 lines 23-27. Accordingly, no new matter is added by these amendments and their entry is respectfully requested.

Applicants respectfully request reconsideration of the application in view of the remarks made herein.

Rejection under 35 USC § 112, first paragraph

Claims 1-9 are rejected under 35 U.S.C. § 112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that inventors, at the time the application was filed, had possession of the claimed invention. The applicants respectfully traverse this rejection as it is and as it could be applied to the amended claims.

The Applicants respectfully disagree with the rejection on the basis that a full descriptions of “rGFP” and “pGFP”, including a description their structure, is be found throughout the specification, for example in lines 10-17 of page 3. Nevertheless, solely to expedite prosecution, Applicants have amended claim 1 to recite a polynucleotide encoding a *Pitilosarcus* or *Renilla* GFP or biologically active variant thereof. The Applicants have also presented new claims which recite the sequence of SEQ ID NOS: 5 and 2, encoding exemplary *Pitilosarcus* and *Renilla* GFPs, respectively.

35 U.S.C § 112, first paragraph requires that the specification shall contain a written description of the invention, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. As interpreted by

the court in *Vas-Cath*, this "written description" requirement of the statute demands that an application "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention."

It is respectfully submitted that one of skill in the art would recognize that the Applicants were in possession of the invention since the amino acid sequences of several representative *Pitilosarcus* and *Renilla* GFPs and fluorescent variants thereof are provided in the instant specification. Specifically, representative *Pitilosarcus* and *Renilla* GFPs are provided in SEQ ID NO:5 and SEQ ID NO:2, respectively. Furthermore, on page 3 lines 14 to 27, page 5 line 11-page 9 line 16 of the specification, a detailed description of biologically active variants of *Pitilosarcus* and *Renilla* GFPs is provided. In fact, on page 8 line 4 to page 9 line 12 of the specification, a list of at least 41 specific fluorescent variants of each of the *Pitilosarcus* and *Renilla* GFPs is presented. In light of the disclosure of the specific amino acid sequences of *Pitilosarcus* and *Renilla* GFPs or fluorescent variants thereof in the instant specification, one of skill in the art would recognize that the inventors were, at the time the patent application was filed, in possession of the invention. Accordingly, the patent application meets the requirements of 35 U.S.C §112, first paragraph.

The Applicants respectfully submit that this rejection has been adequately addressed and this rejection of claims 1-9 under 35 U.S.C §112, first paragraph, may be withdrawn.

Rejections under 35 USC § 102

Claims 1-9 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Aran et al, assertedly because Aran discloses nucleic acids that anticipate the claims. The Applicants respectfully traverse this rejection.

Aran only discloses a vector encoding an *Aequorea victoria* GFP. As such, Aran fails to disclose *Pitilosarcus* or *Renilla* GFP, as required by the instant claims and, accordingly, cannot anticipate the claimed invention.

The Applicants respectfully submit that this rejection has been adequately addressed and this rejection of claims 1-9 under 35 U.S.C. § 102 (b) may be withdrawn.

Claims 1-9 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Abedi et al, assertedly because Abedi discloses nucleic acids that anticipate the claims. The Applicants respectfully traverse this rejection.

Abedi only discloses a vector encoding an *Aequorea victoria* GFP. As such, Abedi fails to disclose *Pitilosarcus* or *Renilla* GFP, as required by the instant claims and, accordingly, cannot anticipate the claimed invention.

The Applicants respectfully submit that this rejection has been adequately addressed and this rejection of claims 1-9 under 35 U.S.C. § 102 (b) may be withdrawn.

Claims 1-9 are rejected under 35 U.S.C. § 102 (e) as being anticipated by Anderson et al, assertedly because Anderson discloses nucleic acids that anticipate the claims. The Applicants respectfully traverse this rejection.

Anderson only discloses a vector encoding an *Aequorea victoria* GFP. As such, Anderson fails to disclose *Pitilosarcus* or *Renilla* GFP, as required by the instant claims and, accordingly, cannot anticipate the claimed invention.

The Applicants respectfully submit that this rejection has been adequately addressed and this rejection of claims 1-9 under 35 U.S.C. § 102 (b) may be withdrawn.

Rejections under 35 USC § 103

Claims 1-9 are rejected under 35 U.S.C. § 103(a) as being obvious over Anderson in view of Bryan, assertedly because Anderson discloses constructs and libraries of constructs, which, when combined with Bryan's *Renilla* GFP, render the claims obvious.

The primary reference in this rejection is the Anderson patent. The Anderson patent is owned by Rigel, Inc. ("Rigel"), which is the same entity that owns the present application.

Referring to 35 USC § 103(c), MPEP § 706.02(l)(1) states "Effective November 29, 1999, subject matter which was prior art under former 35 U.S.C. 103 via 35 U.S.C. 102(e) is now disqualified as prior art against the claimed invention if that subject matter and the claimed invention "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." **This change to 35 U.S.C. 103(c) applies to all utility, design and plant patent applications filed on or after November 29, 1999**, including continuing applications filed under 37

CFR 1.53(b), continued prosecution application filed under 37 CFR 1.53(d), and reissues.” (Emphasis added).

As such the changes made apply to all utility patent applications filed on or after November 29, 1999. Since instant application was filed on November 10, 2000, which is after November 29, 1999, the above law applies to the instant application.

As such, if the Anderson patent and the instant application were owned by the same person or subject to an obligation of assignment to the same person, at the time the instant application was made, the Anderson patent is not available as prior art under 35 USC §103.

The invention claimed in the instant patent application was subject to an obligation of assignment to Rigel Pharmaceuticals, Inc. (“Rigel”), and an assignment executed by the inventors was recorded on April 14, 2001 (Reel/Frame 011708/0902) (copy enclosed).

The Anderson patent was owned by Rigel at the time the claimed invention was made, as evidenced by an assignment to Rigel recorded on January 4, 1999 (Reel/Frame 9676/0772) (copy enclosed).

Thus, as stated in §103(c), the subject matter of the cited Anderson patent and the claimed invention were, at the time the invention was made, both owned by Rigel or both under an obligation of assignment to Rigel. As such the Anderson patent shall not preclude patentability under §103.

Therefore, the Anderson patent is not available as prior art against the claimed invention of the present application, and, accordingly this rejection of claims 1-9 under 35 U.S.C. § 103(a) may be withdrawn.

CONCUSION

Applicant submits that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-0815, order number RIGL-011.

Respectfully submitted,
BOZICEVIC, FIELD & FRANCIS LLP

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